

ABSTRACT OF THE DISCLOSURE

A power management architecture for an electrical power distribution system, or portion thereof, is disclosed. The architecture includes multiple intelligent electronic devices (“IED’s”) distributed throughout the power distribution system to manage the flow and consumption of power from the system. The IED’s are linked via a network to back-end servers. Power management application software and/or hardware components operate on the IED’s and the back-end servers and inter-operate via the network to implement a power management application. The architecture provides a scalable and cost effective framework of hardware and software upon which such power management applications can operate to manage the distribution and consumption of electrical power by one or more utilities/suppliers and/or customers which provide and utilize the power distribution system. Security mechanisms are further provided which protect and otherwise ensure the authenticity of communications transmitted via the network in furtherance of the management of the distribution and consumption of electrical power by the architecture.